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Conflict and Change

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**The BP Oil Spill as a Cultural Anomaly?  
Institutional Context, Conflict and Change**

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## **ABSTRACT**

This paper argues that the BP Oil Spill is, potentially, a “cultural anomaly” for institutional changes in environmental management and fossil fuel production. The problem as defined by the spill’s context, the potential solutions provided by the competing logics in that context, and the selection of problem-solution bundles through the fortuitous timing of events and more calculative efforts of institutional entrepreneurs within that context have come close to acting as a catalyst for deeper change; but not quite. For reasons we discuss, true change in our approach to handling issues related to oil drilling, oil consumption and environmental management have yet to occur.

## **THE BP OIL SPILL**

### ***We think we know what happened...***

On April 20, 2010, the mobile offshore drilling rig *Deepwater Horizon* exploded about 41 miles off the coast of Louisiana when methane gas ran up the drilling column and ignited. At the time of the incident, production casing was being installed and cemented by Halliburton Energy Services. The explosion killed 11 platform workers and injured 17 others. Within two days, the rig sank, setting off an unrestricted flow of oil from the damaged wellhead 5,000 feet below the surface of the Gulf of Mexico. An estimated 53,000 to 62,000 barrels of oil were released per day, covering 3,850 square miles in just over a week. After 88 days of unsuccessful attempts to stem the flowing oil, the wellhead cap was finally replaced on July 15. On September 19, nearly five months after the initial blowout, the federal government declared the well officially “dead”. At this point, the BP Oil Spill became, in terms of volume, the largest accidental spill in history.

### ***Yet we don't really know what happened because we don't know what it means...***

In the public media there were multiple attributions of accountability for the disaster. The rig was owned by Transocean Ltd and leased to BP PLC, and some accuse engineers from both companies with misinterpreting the wellhead pressure test data and failing to respond to other warning signs before the explosion. Others accuse BP specifically with cutting corners on a project that was behind schedule and over budget. Still others (including BP) accuse Halliburton for a poor job of cementing and testing the well head and Transocean for failing to maintain the blowout preventer, suggesting it had a bad valve and weak batteries. And still others find fault with the Minerals Management Service – the federal agency responsible for ensuring

that an oil rig was operating safely – accusing it of lax oversight and impropriety.

This public battle over “fault” was itself a scripted move to stamp causality on a complex set of events. Like all attributions of fault and apprehension of “facts”, such moves are based on the current culture of understanding in which such facts are embedded. Technological and economic activity may be the proximate cause of environmental problems, such as the BP Oil Spill; but it is our individual beliefs, cultural norms and societal institutions that guide the development of that activity and thus shape how we perceive such events – that is, our institutional logics (Friedland & Alford, 1991; Jennings & Zandbergen, 1995; Bazerman & Hoffman, 1999; Thornton, 2004; Hulme, 2009; Hoffman, 2010). When an event or issue poses a potential challenge to a dominant technological or economic institutional order, conflict ensues over the nature, meaning, and response to the event. If this challenge is significant enough to generate substantial conflict, the event can become a “cultural anomaly” for the current order.

A “cultural anomaly” is a scientific finding of sufficient magnitude that it helps create a crisis within a given scientific paradigm, such as what Maxwell’s observations about electricity or Roentgen’s observations about x-rays did to the Newtonian approach to physics (Kuhn, 1970: 52). Jointly or singly, cultural anomalies help push us into what Kuhn (1970) refers to as “revolutionary science,” a period in which the pursuit of explanations and understanding results in the exploration of alternatives to long-held, taken-for-granted assumptions. We rely on the concept of the “cultural anomaly” to signal the temporal and social nature of these anomalies, especially the fundamental challenge they pose to actors’ identities within an existing institutional order.<sup>1</sup> Various referred to as shocks (Fligstein, 1991), jolts (Meyer, 1982) or discontinuities (Lorange, Scott Morton & Ghoshal, 1986), events as cultural anomalies focus

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<sup>1</sup> For us, an “institutional order” includes individual beliefs, cultural norms, and social institutions; each institution within that order itself is upheld by different sets of ideas and actions, including by one or more deeper logics (Friedland and Alford, 1991; Thornton, 2004).

sustained public attention and invite the collective definition or redefinition of social problems and the actors themselves (Pride, 1995).

Oil spills, as an observable type of ecological disaster, sometimes play this transformative role in the evolution of society. The Santa Barbara Oil spill is a notable example. For ten days in January 1969, the Union Oil Company's Platform A spilled an estimated 3.25 million (US) gallons of thick crude oil into the Santa Barbara Channel on the coast of Southern California. By mid-May, the slick had covered virtually the entire city coastline, as well as most of the coastlines of Ventura and Santa Barbara Counties (Scheffer, 1991). Locally, this event led to investigations, moratoriums on off-shore drilling, and remediation. Non-locally, the event was one of the lightning rods in the early 1970s that super-charged policy and legalistic approaches to environmental regulation (Molotch, 1970; Dowie, 1995; Hoffman, 2001).

Will the BP Oil Spill leave the same sort of lasting legacy? Will it represent an anomaly for the institutional order? At this early stage we can begin to piece together the elements that will form the foundation for answering these related questions. This is not about assigning blame or responsibility, but about analyzing the processes by which both the problem is defined and solutions are formulated. We believe that period is taking place now.

### **CONTEXT, CONFLICT AND CHANGE**

In order to assess the full impact of the BP Oil Spill, we must consider the event as defined by several elemental processes. The first process is based in the *context of the event*; the second reflects *changes* in our societal order. Both are inherently political and highly contested; and as they evolve, we can look more deeply at the competing institutional logics that are exposed and guide this *institutional conflict*. Equally important, we can examine the role that

institutional entrepreneurs seek to play in shaping and guiding the change process. In the end, a period of revolutionary science is a period of opportunity for these entrepreneurs to create a new order out of the flux that this event generates. The various factors that can potentially generate a cultural anomaly are displayed in Table 1 and elaborated below with regards to the BP Oil Spill.

--- Insert Table 1 about there ---

### **Event Context and Problem Definition**

The processes by which people think about and attend to an event like the BP Oil Spill are social and cultural, shaped by the group, organization, industry, and organizational field of which they are a part (March & Olsen, 1989; Ocasio, 1995; Thornton & Ocasio, 2008). The context in which the event occurs conjures up associated events or issues which, when linked, foster interpretations of the problem that signal its impact.

Examples of this contextual framing and problem identification process are many. One that has become iconic is Rachel Carson's book, *Silent Spring* (1962). In her commonly accessible, yet pointed way she argued that chemical manufacturers, by barraging the environment with the synthetic pesticide, dichlorodiphenyltrichlorethane or DDT, were poisoning the entire food chain and ultimately ourselves. Rachel Carson did not discover the problems associated with DDT and the ecosystem. She performed no research studies nor any technical analyses. She was not even the first person to write about it. The problems of DDT had been well documented since World War II. What was critical about Carson's book (aside from her literary style) was the time in which she chose to write it. It emerged at a time when people were receptive to such a message. Much as the situation creates a leader, the context

creates an issue. Had Carson written her book even five years before, it would not likely have caused the same level of controversy. It may not have made any sense given the dominant logics of the time. In fact, reflecting that perhaps she was just a little ahead of her time, most magazines turned down her initial proposals to write articles on the topic, forcing her to resort to writing a book. And, after the book was completed, the *New Yorker* magazine faced legal threats and the withdrawal of advertising revenue for agreeing to serialize parts of the volume.

In another example, if it weren't for context, it is not likely that the Love Canal disaster would have been noticed when it was. In the words of Hugh Kaufman, the EPA official who helped expose the story, "Love Canal was a catastrophe but it wasn't the worst catastrophe in the country, or in New York State, or even in Niagara County." But, he says "it was Love Canal, Hooker Chemical and Niagara Falls, honeymoon capital of the world. Editors all over the country had orgasms. So Love Canal became catastrophic, not any of the other 10,000 hazardous dump sites across America" (Keating & Russell, 1992: 33). This event became a landmark opportunity, empowering environmental activists to wage institutional "war," given its conveniently sensational participants, the emerging awareness of something called hazardous waste sites and its coincidental timing with Jimmy Carter's presidential campaign (Hoffman, 2001).

One final example that relates back to oil spills is the way in which the cultural context defined the 1989 *Exxon Valdez* oil spill (Hoffman & Ocasio, 2001). This was by no means the first, nor was it the worst oil spill in US waters. Shown in Table 2, it ranked as the twenty-third largest spill in history (fifteenth largest in 1989) and the second largest in the US at the time. The spill that preceded it in rank occurred on November 1, 1979, when the freighter, *Mimosa* rammed the Liberian tanker, *Burmah Agate*, while anchored off the port of Galveston, Texas. The ship



and its leaking cargo burned for five days, out of which leaked 10.7 million (US) gallons of crude oil. A large portion of this oil washed up on the beaches of Galveston over the ensuing weeks. This event spilled 600,000 more gallons than the *Exxon Valdez*. Yet, in terms of notoriety and punitive damages inflicted, the *Valdez* far exceeded it. Pictures of dying ducks and pristine Alaska coastline covered with oil sludge were splashed over the newsprint and TV media. The various ascriptions of fault, including the scenarios of the *Valdez*'s approach to the Alaskan coastline displayed in congressional committee, were trundled out daily before the public.

--- Insert Table 2 about here ---

The reason for *Valdez*'s dubious honor was not the scale of the accident as much as it was *the contextual timing*. Oil spills occurring in 1969, 1979 and 1989 each are viewed differently depending on the dominant culture of the time. The Santa Barbara oil spill of 1969 represented an aesthetic concern for the beautiful beaches in that affluent community. The *Amoco Cadiz* spill in 1978 was handled largely as a maritime issue (Hoffman, 2001). The *Burmah Agate* was largely coded as a maritime issue, focusing on the attempts by firefighters to extinguish the flames on the floating wreck, keep the undamaged oil-filled compartments from rupturing and contain the released oil. Coverage of the clean-up efforts on the Texas beaches was negligible. But the *Exxon Valdez* was framed primarily as an oil pollution issue. External coverage was intense, chronicling a story of a damaged environment. This made the well know (and disliked) company into a visible villain and the primary subject of coverage. Fortunately, or unfortunately, for the *Burmah Agate* spill, only a low status company was fingered — the British

Burmah Oil Company which owned the tanker (Hoffman & Ocasio, 2001).

**Factors Driving Event Definition.** Each of these events above offers an example of contextual factors that can drive event interpretation, including framing, visibility, and timing. The framing of the Santa Barbara spill and *Exxon Valdez* groundings as ecological disasters, one viewed from an ethos of the 1969 California Shangri la and the other from a 1989 portrayal of the “last wilderness”, captured sufficient attention in various media to allow the stories to gain enough steam for public rallying points to develop. Once mobilized, the various publics and their representatives were able to turn the events into significant anomalies.

Ultimately, the success of framing, the visibility in multiple media, and timing depended on their alignment with the deeper structures of power in society. A structure for understanding and analyzing event attention can be formed out of several components (Hoffman and Ocasio, 2001). The *rules of the game* at the time of the event guide the formal and informal principles by which decisions were made. The *status of the players* involved in the event also grant it social saliency (Fiske & Taylor, 1991), serving to intensify interest and increase attention on a particular occurrence. *Attributions for the causes of events* generate further attention by creating clear villains and the focus of blame (Tetlock, 1990). *Critical novelty* and *incongruity* create greater confusion and flux within institutional arrangements by forcing interpretations to reach beyond the standard repertoire of codes and frames for making sense of the event.

Most importantly, in order to become a cultural anomaly, each event had to challenge the *identities* of key actors in the paradigm or cultural epoch (Hoffman & Ocasio, 2001). Identities are the common norms, values, and systems of meaning by which participants establish rules of inclusion, competition, and social comparison among members, create distinctions within and between groups, and delimit group boundaries. Identity emerges in part through the collective

responses to external threats to the collectivity (White, 1992). It embodies meaning and sense-making (Fiol, Hatch & Golden-Biddle, 1998) focused on answering the following questions for its members: Who are we? What are we? What do we do that makes us distinctive? If events raise these critical underlying questions, they can become cultural anomalies that alter the dominant institutions of society.

**Context and Problem Definition of the BP Oil Spill.** To begin, the BP Oil Spill occurred when the rules of the game had already changed with regards to environmental issues. The spill occurred during a period of extremely heightened attention to environmental issues, both within the general public and the corporate sector – what has been called the “third wave” of environmental management (Hoffman, 2001; Lowitt, Hoffman & Walls, 2009). The first wave occurred around 1969 to 1970 with the formation of the Environmental Protection Agency (EPA) as the arbiter of environmental rules and norms, and environmental management became synonymous with regulatory compliance. The second occurred around 1989 to 1991 when industry began to take a pro-active stance on environmental protection as an issue of strategic importance, one that could alter markets and affect profit and loss statements (Jennings, Zandbergen & Martens, forthcoming; Zeitsma & Lawrence, 2010). The third wave began around 2008 – with the growing recognition of the interconnected nature of the global ecosystem and a growing concern that humans are altering it on a global scale – and had not yet diminished at the time of the spill (Lowitt, Hoffman & Walls, 2009).

All of these stages were propelled by critical events (such as *Silent Spring*, the Santa Barbara oil spill, Earth Day, the formation of the EPA, Seveso, Love Canal, the termination of Ann Burford Gorsuch, Bhopal, the ozone hole, Chernobyl, the Mobro 4000 garbage barge, medical waste on east coast beaches, the greenhouse effect, and the *Exxon Valdez*) (Hoffman,

2001). The BP Oil Spill is both the product of the elevated attention to environmental issues in 2010 and will add to the growing momentum of the social shift that this third wave is creating. It comes at a time when politicians and the general public are expecting corporations to be good corporate actors.

Moving to the next component, there were a great many new and old high status players involved in the BP Oil Spill. The first and most obvious was BP and the publically traded “Oil Majors” (ExxonMobil, Chevron, Royal Dutch Shell, ConocoPhillips, and Total). BP was a very high profile company that had enjoyed a strong reputation for environmental sustainability earlier in the decade, when it broke from the other Oil Major and portrayed itself as “green,” along with diversifying its portfolio to include more renewable energy sources (solar and wind turbine). But it had had a series of events that tarnished that reputation badly (spills at a Prudhoe Bay drilling rig and an explosion at a Texas City Refinery), some say to the delight of the other Oil Majors that BP had deliberately embarrassed. By 2010, BP had become more a part of this group, than a maverick green oil company standing apart from it.

Next were the engineering firms and the regulators - technical actors. The company responsible for installing the casing on the well was Halliburton. The name had become synonymous with former Vice President Dick Cheney who is greatly despised and distrusted by the political left in the United States. That association created a further sense of impropriety. The principal regulator at the start of the event was the Minerals Management Service. The improprieties that surfaced around Minerals Management (including corruption and sexual favors) lent an air of seediness that cemented a layer of the definition of this problem as unethicality, incompetence and corruption.

A third high status player was the Gulf States community. Having only recently suffered the devastating impact of Hurricane Katrina in 2005, there was a sense of compassion and shame that many within America feel for this community, one which assured that the BP Oil Spill would be framed as more than simply an environmental issue. The fact that this event occurred during a major recession further assured that this event would be coded, not only as environmental, but more prominently as economic (NewsInferno, 2010).

A final set of high status players were the US, Britain, and associated national level agencies in charge of sorting out the jurisdictional issues of the spill. US President Barack Obama's position on the Spill had been both visible and heavily scrutinized. Obama had alternatively represented the Gulf States community, the interests of the Oil Majors, the US national interest in not stalling the recovery from recession, and the US-British international alliance. This latter dynamic introduced a nationalistic element to the debate, as BP was framed as a "foreign" firm polluting US waters. For example, an analysis of his use of the names "BP" versus "British Petroleum" by the *Economist* magazine showed a correspondence of the usage rate with the intensity of negotiation over blame and damages, with the "British Petroleum" term peaking during the most intense period of negotiation and fault finding and dropping after BP agreed to substantial remediation costs (*Economist*, 2010). During that same period, the British government signaled its increasing support of BP as a bell weather British company by publishing its support for the maintenance of shareholder value without liquidation or split-up.

The identities of some of these key actors have been challenged by the BP Oil Spill. The spill called into question the identity of the oil industry, including BP. Prior to this event, the oil industry had often used the term "safe drilling" in its arguments to drill in the Alaska National Wildlife Refuge. Indeed, a strong belief in the power and dominance of human engineering and

technology was preeminent. The BP Oil Spill appeared to have challenged that preeminence. That the leak defied all efforts to stop it for 88 days was both critically novel and challenging to our identity as technologists. For many, this inability to cap the well was confusing and contrary to our beliefs about the range and control that we have over technology and the natural environment. That legacy will last if the term “safe drilling” is ultimately rejected from our lexicon as a fallacy (just as many would like to see the term “clean coal” rejected as well).

The American economic identity, which has been strongly anchored around fossil fuel use, including a reliance on foreign fossil fuels, was also challenged. The BP Spill has been part of the third wave of environmental management, which is based on concerns about climate change, terrorism, and diminishing resources. Climate change has driven a lot of attention towards renewable energy and away from fossil fuels. For many, the BP Oil Spill was a perfect example of the ecological hazards of relying on fossil fuels. Terrorism, similarly, has driven a great deal of attention towards reducing our dependence on foreign oil. In the last Presidential election, the tag line for this desire was “drill baby drill” as a call to exploit domestic reserves of oil. But the BP Oil Spill challenged the notion of fossil fuels exploitation completely. Some have sought to link the BP Oil Spill to concerns over “peak oil” given the extreme depths to which BP was drilling for oil. With oil running out, the argument goes, we must shift to alternative fuels; there is no other choice. While many are sympathetic to this argument over the long run, in the short run, they still feel it is simply not possible.

### **Conflicting Institutional Logics and Solution Generation**

The solutions to problems are driven by factors occurring at the overt level of social information processing that reflect the deeper level of power politics. Social information

processing refers to how various actors in society generate, distribute, and consume information regarding important social issues (Stinchcombe, 1990). Social information processing is inherently political and leads to contests for control among disparate players (Tetlock, 1990; Ocasio, 1997; White, 1992), given that their identities are associated with competing perspectives of institutional reality and of the meaning of the event in question. Event attentional processing becomes a contest over meaning among competing players in various sectors of society (Hannigan, 1996). These contests generate positions and alternatives, which in turn act as potential solutions in situations.

Discourse itself depends on the dominant logics and prevailing rules of the game. Trigger events like the BP Oil Spill offer an opportunity to explore the deeper logics that drive competing definitions of the problem and solution. Defined as "axial principles of organization and action based on cultural discourses and strategic practices prevalent in different institutional or societal sectors" (Thornton, 2004: 2), logics are "the belief systems that furnish guide-lines for practical action" (Rao et al., 2003: 795). Because institutions inherently contain contradictions, multiple logics are available to individuals and organizations as they operate within them (Friedland & Alford, 1991). Anomalies like the BP Oil Spill are refracted through the different lens of competing logics, exacerbating conflict.

In the case of environmental issues, seven competing logics divide the public on their nature and importance (Hulme, 2009). Table 2 displays these logics and the positions they engender. Some of the logics are concerned with highly epistemological and existential issues (logics 1-4 in table 2), generating equally deep polarities among positions. One of the deepest issues around which there are competing logics is the *differing ways in which we understand science and scientific knowledge* (Logic 1 in Table 2). This logic is anchored around our

“expectations about what science can or should tell us” or whether “we view the authority of scientific knowledge in different ways” (Hulme, 2009: 74). Within this axial dimension, some positions are aligned with the view that science can assess the ecosystem and has demonstrated negative impacts. For instance, Greenpeace describes the BP Oil spill as having “devastating consequences for Gulf Coast communities and the fragile wetlands, bayous, and coastal waters on which they depend” (Greenpeace, 2010). The potential solutions to the spill are equally aligned with these views. Garret Graves, adviser on coastal issues to Louisiana Governor Bobby Jindal, states that “I don't think there is any question that we're talking about billions of dollars in remedial action” (Schliefsstein, 2010).

--- Insert Table 3 about here ---

In contrast, other positions are built around the view that in the face of the uncertainties of the situation and type of discipline (ecology), science cannot provide clear answers; that is, “[u]ncertainty pervades scientific predictions about future performance of global and regional regimes” (Hulme, 2009: 83). Stan Senner, director of conservation science for Ocean Conservancy says that “the Gulf of Mexico is a different environment” than Prince William Sound. Professor Ed Overton at Louisiana State University adds that “[t]here is some greater capacity for that environment to handle hydrocarbons” (Rohrer, 2010). As a result of these positions, some solutions are as extreme as that proposed by syndicated pundit Rush Limbaugh: “The Ocean will take care of this on its own if it was left alone and left out there...It's natural. It's as natural as the ocean water is” (Richard, 2010).



In contrast to logics about existential questions on issues like the nature of scientific knowledge, other competing logics are more material in nature (Logics 5, 6, and 7 in Table 3). For instance, there is a competing logic about how we *prioritize development goals* (logic 6 in Table 3). On the one hand, there is the position that nature must take precedence over human development. For instance, when commenting on disasters like the BP Oil Spill, Jean-Michel Cousteau states that: “We need to implement the precautionary principle, which requires the user to prove that any action taken will not cause harm. If we are not convinced, then the project should not be allowed to proceed, whatever the profit” (Cousteau, 2010). For Naomi Klein the issue runs much deeper: “the Deepwater Horizon disaster is not just an industrial accident – it is a violent wound inflicted on the Earth itself” (Klein, 2010).

This kind of positioning lies in direct opposition to a belief that nature must be exploited for the maintenance of the society that we all enjoy. From this vantage, environmental mistakes such as the BP Oil Spill are a necessary (though unfortunate) by-product of the development imperative. In the words of Bob Gagosian, president of the Consortium for Ocean Leadership and a former director of Woods Hole Oceanographic Institution, “We are going to have future spills, we are going to have future blowouts...The problem with human beings is that they’re people, and make mistakes. Let’s face it: the U.S. gets a third of its domestic oil from the gulf, so that’s not going away tomorrow morning. We need that oil” (Yarett, 2010). Others go further to claim that environmentalists are against human development, and have even caused the BP Oil Spill, claiming that their opposition to coastal drilling has pushed oil companies to drill deep-water wells that are less safe (Media Matters, 2010). Sarah Palin has even argued that “extreme environmentalists who hypocritically protest domestic energy production offshore and onshore”

are actually harming the environment by pushing production (and jobs) to countries that have less concern for environmental protection (Media Matters, 2010).

Perhaps the most practical issue around which these deeper logics compete is *the appropriate role of government intervention* in providing solutions and action (Logic 7 in Table 3). For some, the role of government is in protecting public safety and responding to health emergencies. In this regard, they view the Obama Administration's response as too late and too little. For others, any government involvement should be met with skepticism. Some have called it "Obama's oil spill," claiming that "he converted it into the crisis it has become for his own personal reasons and his own personal political gain" (Ryter, 2010). Rep. Joe Barton (R-TX) called Obama's financial concessions from BP for cleanup costs a "shakedown" (Fang, 2010). Rep. Paul Broun (R-GA) has stated that "maybe" Obama is "purposeful[ly]" giving a "poor response to this oil spill" so he "could promote his energy tax (Fang, 2010). Others see an even more sinister impact of government intervention. In an interview with Ron Paul, Alex Jones reasoned that "a global governance office" has already been established "with a vice president over it. They've always wanted to nationalize oil so they get an inside deal" and the BP Oil Spill is an opportunity to do it (Fang, 2010).

These seven competing institutional logics form the core of the tensions that lie within the debate over the BP Oil Spill as well as other environmental issues like climate change, endangered species protection, and clean water controls. They create positions and thereby solutions and alternatives that are then further refined, debated, and eventually sorted and selected.

## **The Change Process**

Institutional change is a non-rational process in the world of culture and technology. It is based on a sorting, matching and selection process at an institutional level (March & Olsen, 1989; Jennings, Martin, Patient, Gravel & Yuan, 2005). Given the multiple actors, preferences, institutions, and uncertainties, the outcome is driven as much by the who, when, and where of political positioning in the decision nexus as by the what of the technical problem; in other words, by many of the same features that are part of the garbage can model itself (Cohen, March & Olsen, 1972) - the timing of events and the actors matching problems and solutions *in situ*.

**Again, the Importance of Events.** Events can either facilitate institutional change partially consistent with existing institutional arrangement or can effect a substantial alteration in those arrangements, one reflecting new institutional conceptions. The first is more politically derived. The second is more sudden and catastrophic in its impact. In the first case, events serve as a *catalyst* (Hoffman, 2001). In the thermodynamic sense, a catalyst is a compound which, through its mere presence, facilitates a more rapid chemical reaction. It does not force a reaction that would not occur otherwise. In the same way, events can serve to hasten the development of the institutional issue of the moment. They do not cause it to form. For example, a toxic chemical cloud of dioxin was accidentally released from a chemical plant in Seveso, Italy in 1976. At that time, the banning of carcinogenic substances such as DDT was the topical focus of environmental regulation. As a result, Seveso served as a catalyst for the banning of dioxin. Ten years later, a cloud of methyl-isocyanate was accidentally released from a Union Carbide plant in Bhopal, India. At that time, the topical policy focus was corporate disclosure of chemical contaminant information to employees and the local communities. Therefore, the result of this incident was the development of several community right-to-know laws, including the Toxics Release Inventory in the United States, requiring that firms report all releases of contaminants

from their plants to the public. These events did not cause the dioxin ban or the establishment of right-to-know legislation. They catalyzed their institutional development (Hoffman, 2001).

But the change process can also come from the most unpredictable of sources and have results far from what was intended. For example, President Reagan's decision to defederalize the US government and begin by challenging the legitimacy of the EPA in 1981 proved to be a decisive moment in the evolution of corporate environmentalism. Hardly considered a staunch environmentalist, Reagan catalyzed the initiation of an institutional shift, whereby corporations adopted new forms of environmental responsibilities which, just two years before, they were resisting (Hoffman, 2001). In the words of Sierra Club conservation director Carl Pope, President Reagan "reinvented the environmental movement by his contempt for it" (Keating & Russell, 1992: 33).

Ultimately, events can highlight breakdowns or failures of existing institutional arrangements, thereby creating chaotic shifts in the trajectory of institutional development. They can identify new areas of concern that existing institutional rules or norms do not properly address. For example, once identified, the Love Canal disaster profoundly changed the institutional face of environmentalism in the US. For the first time, an environmental incident emerged as a sudden and unpredictable disaster from as innocuous a place as one's own backyard. Prior to Love Canal, the notion of a hazardous abandoned waste site had no meaning within the dominant institutional order. Although previously seen, it had yet to be defined and categorized as a major environmental concern. Had it not been for the institutional impact of Love Canal, the incidents at Times Beach, Stringfellow Acid Pits and the Valley of the Drums might not have had much contextual meaning. Furthermore, as a result of the ensuing negotiation among environmental groups, business, and the government, the institutional face of

corporate environmentalism was also profoundly changed with passage in 1980 of the Comprehensive Environmental Response Compensation and Liability Act - the Superfund (Dower, 1982). With this legislation, industry was now assigned a responsibility for these sites, being held liable for actions which were legal when undertaken. Such a notion was previously inconceivable. Worse yet, a company could also be held fiscally liable for an entire cleanup regardless of its level of involvement in the contamination. Love Canal profoundly changed the institutional conceptions of corporate environmental management (Hoffman, 2001).

Depending on the definition of the BP Oil Spill as an event, solutions will follow a similar form. It cannot be overstated that the spill occurred during one of the worst financial recessions in US history. This context leads to solutions in two different directions. The first is increased emphasis on renewable energy beyond that which was underway already. Investment in “green tech” had already been elevated as a major market segment before this incident and President Obama had been pushing the agenda. The BP Oil Spill will catalyze that sector’s growth through both private and public expenditures. The second direction is the opposite of the first. The financial crisis makes the notion of an extended drilling ban implausible. Therefore, we cannot expect a serious drop in oil exploration due to the BP Oil Spill; we can only expect a concurrent effort to develop alternative energy sources.

**Enter Cultural Entrepreneurs.** Events, by themselves, do not do the negotiating in organizational fields; actors do (DiMaggio, 1988). Events empower social actors to negotiate while directing the form and the focus of their strategy. Institutional entrepreneurs (Fligstein, 1997; Lawrence, 1999) seek to shape the discourse, norms and the structures that guide organizational action (Maguire, Hardy & Lawrence, 2004) by inserting their interpretations of events into the institutional discourse. As in all field-level debates, certain individuals and

organizations have the ability to influence the rules of the game (Fligstein, 1990). Yet, even powerful actors cannot simply impose new logics and norms on a field. At some level, the norms must be accepted by others (Beckert, 1999). Actors that lobby for the acceptance of these new logics, norms, and practices illustrate the work that institutional entrepreneurs in order to create and build legitimacy.

Recent discussions have taken the notion of the institutional entrepreneur further by acknowledging that institutional entrepreneurs do not act alone or in isolation. Individual agents form political networks and coalitions to act as “important motors of institution-building, deinstitutionalization, and reinstitutionalization in organizational fields” (Rao, Monin and Durand, 2003: 796). This conception provided a bridge between institutional theory and social movement theory (Davis, McAdam, Scott & Zald, 2005), focusing attention on the ability of social movements to give rise to new organizational fields and change the demography of existing organization fields (Rao, Morrill, & Zald, 2002).

Consider the formation of the Valdez Principles by the Coalition of Environmentally Responsible Economies (CERES) in 1988. The *Exxon Valdez* spill empowered their emergence but as Joan Bavaria, one of CERES' founders acknowledges, "*Valdez* was really a matter of convenience. It was a tragedy that moved a cause. [The natural] environment as an investor issue really started up in 1981. It was in the early part of 1988 that things really heated up when we had Bhopal, dirty beaches, and the big media press. We were really a reflection of changes going on within the environment" (Hoffman, 1996: 53). Thus, the *Valdez* spill catalyzed the formation of CERES as an actor network. CERES itself was a catalyst for another change that was already underway. In the words of Amoco's EH&S Vice President, "I think Joan Bavaria sensed the owner's movement and acted on it. CERES represented a piece of what was

fundamentally going on, owners of corporations trying to effect change in corporate governance of environmental issues. Without CERES, things could have happened as they did, but perhaps later. It was part of a whole owner's movement” (Hoffman, 2001: 21).

In the case of the BP Oil spill, all of the usual suspects lined up for commentary on the spill, including corporate representatives, government, environmental NGOs, and the media. Initially, Louisiana Governor Bobby Jindal was recognized as spokesperson, declaring a State of Emergency after the spill and providing relief to local victims (Selman, 2010). Another recognized spokesperson and potential institutional entrepreneur was US Coast Guard Admiral Thad Allen. As head of the National Response Team he held regular news conferences, dealing primarily with the technical aspects of progress for capping the well and directing the cleanup.

But as the spill continued and the technical solutions failed, opportunities for other actors were created. In mid-May of 2010 US President Barack Obama, and other federal representatives toured the Gulf State area (with Jindal), and Obama grabbed center stage with the claim that: “[W]e’re dealing with a massive and potentially unprecedented environmental disaster. The oil that is still leaking from the well could seriously damage the economy and the environment of our Gulf States and it could extend for a long time” (Kellerhals, 2010). At the same time, excoriated by the press for his callous approach to the spill, BP’s CEO Tony Hayward retired early, replaced by Bob Dudley. Dudley had experience dealing with the spill, having been in charge of the Gulf spill group, as well as executive vice president of BP activities in the Americas and Asia. Dudley quickly moved to acknowledge the problem and begin the task of payouts for the Gulf States community: "In this change of roles, I particularly want the people of the Gulf Coast to know that my commitment to remediation and restitution in the region is not lessened. I gave a promise to make it right and I will keep that promise” (BP Company, 2010).

This created a platform for BP to dilute its image as a villain in this event and begin to gain credibility in influencing the form of the debate over the event; something that Exxon was unable to do in the wake of the *Exxon Valdez* spill.

Oddly enough, no well-recognized spokesperson or active network arose as representative of the Gulf States community as a whole. In other words, unlike the *Valdez* and also Santa Barbara cases, no local coalition of representatives or specific NGOs were able to build directly off the event as *the* voice for change. Greenpeace and other NGOs made numerous comments on the spill, and they were consulted by the media whenever there were turns of events. But the limelight was never controlled by these groups, as compared to the direct and indirect effects exerted by exchanges between Obama and BP's heads. Throughout the summer, the comments of BP and the Obama Administration (Secretary of Interior Ken Salazar, White House Director of Energy and Climate Change Policy Carol Browner, and others) were routinely published on the front pages of the *Washington Post*, *New York Times*, and other high profile outlets. But these commentaries were never elevated sufficiently to challenge the institution of oil exploration and production. Indeed, the discourse itself was capped by the capping of the well on September 19<sup>th</sup> of 2010, when Obama created the following institutional lid (Levitt & Nass, 1989):

“Today, we achieved an important milestone in our response to the BP oil spill – the final termination of the damaged well that sat deep under the Gulf of Mexico. ...However, while we have seen a diminished need for our massive response that encompassed more than 40,000 people, 7,000 vessels and the coordination of dozens of federal, state and local agencies and other partners, we also remain committed to doing everything possible to make sure the Gulf Coast recovers fully from this disaster. This road will not be easy, but we will continue to work closely with the people of the Gulf to rebuild their livelihoods and restore the environment that supports them. My administration will see our communities, our businesses and our fragile ecosystems through this difficult time.” (Malcom, 2010)



So in the end, the only two counterpoised institutional entrepreneurs that appeared to rise out of the BP Oil Spill were President Barak Obama and BP's new corporate president, Bob Dudley. The lack of a powerful environmental voice in the framing of the BP Oil Spill meant that there was no effective counter-balance to the dominant logics of the oil industry within the public debate. The process of sorting, selecting, and matching of solutions to the BP Oil Spill problem was left largely to the oil company and the Obama Administration, thereby assuring that the framing would reflect their specific interests (economic, technological and political) and minimizing the perspective of prominent NGOs as to the environmental damage caused by the event.

### **Interim Conclusions**

Will the BP Oil Spill become a cultural anomaly, leaving a lasting legacy on our society's views towards fossil-fuels, environmental management and energy use? One answer appears to be "not likely." Many of the ingredients for distinguishing a cultural anomaly have been shown to have been present (see Table 1). The context certainly led to a strong definition of the problem, and the problem challenged the identity of at least BP and the Gulf States. The conflict created by the event tapped all of the competing frameworks concerning the natural environment, but especially the belief in science and about the nature of risk, around which actors, positions, and solutions differed substantially. Finally, the event led to several change initiatives, including how to organize regional environmental relief, how to charge multinationals for pollution and distribute remuneration, and the need to reduce expectations that technology can fix large scale operational problems in a timely manner. (For example, oil companies seeking to drill in places like the Alaska National Wildlife Refuge will no longer be able to argue that they

can drill “safely” and proponents of offshore oil drilling can no longer use the tag line “drill baby drill”.)

But, while entrepreneurs appeared in the situation to link problems with positions and solutions, and tried to leverage the events to make larger scale changes, these large scale changes do not seem to have taken place. In the end, entrepreneurs never fully engaged the deeper competing frameworks around the environment and the event never really challenged the identity of the Obama Administration, the Oil Majors or the American public and its dependence on fossil fuels. Despite Obama’s attempts to link the event to an urgent need to invest in renewable energy (in a nationally televised speech), the linkage delivered by him alone did not carry the power to shift the debate. One reason is that the public was desensitized and skeptical as the same call had been made by every US President back to Richard Nixon. Another reason is that the ongoing recession and the economic hazards of controls on offshore drilling overrode concerns for present or future environmental risks. The economy is still fossil-fuel based and little serious opposition to continued offshore drilling can be expected.

But, over time, there is a possibility that the institutional order will alter how the event is re-enacted, even long after it has occurred. This is not unusual. Similar events in the past have been retroactively enacted to fit new social structures (Hoffman & Ocasio, 2001). The most vivid example may be the Cuyahoga River fire. On June 23, 1969, the Cuyahoga River caught fire for twenty-four minutes, causing \$50,000 damage to two key railroad trestles in Cleveland Ohio. The cause was attributed to oily wastes dumped into the river from waterfront industries. While the concept of a river so polluted as to ignite would be exceptional by present-day standards, there was no coverage in the national press at the time. It was strictly a local event, of little environmental significance. The *Cleveland Plain Dealer*, where the fire garnered a front-page

story the day after the occurrence and subsequent follow-up through the week, ran stories about the hazards associated with "oil slick" fires and treated the incident as an embarrassment to the city, complaining that "we are tired of Cleveland being the butt of a joke" and criticizing the "the usual amount of oily gunk that has given the river and the city a bad name for years" (*The Plain Dealer*, 6/25/69: 10-A). Yet, in more recent years, the event has been reenacted (Hoffman & Ocasio, 2001) as a touchstone for the genesis of the modern environmental movement (Opheim, 1993; Browner, 1994); it was even made the subject of a popular song by Randy Newman. Thus another possible answer to our opening question about the BP Oil Spill as a potential cultural anomaly is "perhaps in the future".

A third (and disconcerting) answer is "yes, but not of the type we would have hoped." In reality, the BP Oil Spill may become a "negative cultural anomaly," one that begins to lead to change, but does not, thereby reinforcing the current institutional system even more than before. These anomalies are the classic reactionary movements in history, such as the widespread conservatism that followed the French Revolution (Burke, 2006). BP itself has become an example of a company and CEO vilified by the US administrators and policy-makers, along with US-associated Oil Majors. Yet this framing has occurred, without adequate acknowledgement that the system of ever riskier crude oil search and refinement is the real issue, a process that BP was at least trying to reduce relative to its other portfolio investments in renewables. Thus, the responses by the Obama Administration may unwittingly represent a step backward for BP, the Gulf States, US energy policy, and environmental approaches to management, rather than a creative step forward into a better future.

## **Case- and Problem-Based Research**

Apart from demonstrating the possibility that the BP Oil Spill may be a cultural anomaly, our analysis of the BP Oil Spill has sought to make two less observable but no less important contributions. The first is to case-based research. Possibly failed, though high impact cases, like the BP Oil Spill are as important for detailed study as more obviously “successful” ones. In a multivariate research design, this is an obvious point; but in a case analytic approach, where we must be much more selective about which instances to study, it is less so (see Starbuck, 2005 for further commentary). A study of the BP Oil Spill’s devolution shows that many of the ingredients for change were present and that opportunities for change still exist. Contrasting the BP case with the Santa Barbara and *Exxon Valdez* cases further isolates the importance of entrepreneurial action in change. In the former cases, entrepreneurs were part of broader social movements and able to link the cases to those movements (e.g., see Molotch, 1970; Jennings et al., forthcoming). In the BP case, the linkage of the spill with other problems and issues in the oil industry by institutional entrepreneurs has so far failed. This is true even though cases such as the Alberta Tar Sands and deep sea searches in the Arctic are all part of the same pattern of searching for ever “dirtier” oil as conventional reserves dry up. Thus, our paper points to the need to understand more deeply how social movements can leverage such events, and when they are unable to do so.

A second contribution of this article is to problem-based research (Biggart & Lutzenhiser, 2007; Davis & Marquis, 2005). Problem-based research, like any theoretical approach, draws on theoretical principles in its examination of problems as phenomena. Its aim is also to build, not grand theory, but mid-range theory. This theory is strong on context and applied constructs, but weaker on anything approaching covering laws. In addition, the research findings under the problem-based approach are designed to be robust observations – agreed upon “fact.” The focus

then is on finding the mechanisms that lead to facts of a similar class. In our view, few contemporary issues warrant social and cultural analysis by problem-focused researchers more than environmental sustainability issues. We have shown that theorizing and observing context, conflict, and change mechanisms in detail can help provide greater “rigor and relevance” in the assessment of our research question (Tushman & O’Reilly, 2007). We believe that social scientists have a duty to bring this type of research into the public sphere to help resolve such a pressing debate (Hoffman & Forbes, forthcoming), even if our answers are not definitive.

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**Table 1:  
Creating a Cultural Anomaly for the Institutional Order**

	<b>Theoretical Mechanisms</b>	<b>BP Oil Spill</b>
<i>Context</i>	<p>Event setting</p> <ul style="list-style-type: none"> <li>• recognition, timing</li> </ul> <p>Event definition</p> <ul style="list-style-type: none"> <li>• rules of the game, status of players, attribution of causes, critical novelty</li> </ul> <p>Identity Challenges</p>	<ul style="list-style-type: none"> <li>• “Third Wave” of environmental management</li> <li>• Involves high status players; salience and novelty are high, given the prominent failure of technology.</li> </ul> <p>Each high status group, challenged, and two may have changed.</p>
<i>Conflict</i>	<p>Competition within and across logics</p> <ul style="list-style-type: none"> <li>• Seven competing logics</li> <li>• Existential, material, practical</li> </ul>	<ul style="list-style-type: none"> <li>• All seven logics involved in environmental management are challenged to varying degrees, but many were not fully engaged in the public debate.</li> </ul>
<i>Change</i>	<p>Importance of event</p> <ul style="list-style-type: none"> <li>• Catalyst</li> <li>• Catastrophic</li> </ul> <p>Cultural Entrepreneur</p> <ul style="list-style-type: none"> <li>• Rule changer, solution provider</li> <li>• Networks of entrepreneurs</li> </ul>	<ul style="list-style-type: none"> <li>• Potential catalyzing event, but not catastrophic for the institutional order</li> <li>• Several potential institutional entrepreneurs, some new solutions; but no clear institutional change leader.</li> </ul>

**Table 2:  
Worst Oil Spills in World History by Volume**

	<b>Spill Name</b>	<b>Volume</b>	<b>Year</b>	<b>Location</b>
1	<i>Arabian Gulf/Kuwait</i>	380-520 million gallons	1991	Kuwait
2	<b><i>Deepwater Horizon*</i></b>	<b>205 million gallons</b>	<b>2010</b>	<b>United States</b>
3	<i>Ixtoc 1</i>	140 million gallons	1980	Mexico
4	<i>Atlantic Empress</i>	90 million gallons	1979	Trinidad & Tobago
5	<i>Fergana Valley</i>	88 million gallons	1991	Uzbekistan
6	<i>Kolva River</i>	84 million gallons	1994	Russia
7	<i>Nowruz</i>	80 million gallons	1983	Iran
8	<i>Castillo de Bellver</i>	79 million gallons	1983	South Africa
9	<i>Amoco Cadiz</i>	69 million gallons	1978	France
10	<i>ABT Summer</i>	51-81 million gallons	1991	Angola
11	<i>M/T Haven</i>	45 million gallons	1991	Italy
12	<i>Odyssey</i>	40.7 million gallons	1988	Canada
13	<i>Sea Star</i>	35.3 million gallons	1972	Oman
14	<i>Irenes Serenade</i>	30 million gallons	1980	Greece
15	<i>Urquiola</i>	29.4 million gallons	1976	Spain
16	<i>Hawaiian Patroit</i>	29.1 million gallons	1977	Northern Pacific
17	<i>Braer</i>	26 million gallons	1993	United Kingdom
18	<i>Sea Empress</i>	19 million gallons	1996	Wales
19	<i>Othello</i>	18-29 million gallons	1970	Sweden
20	<i>World Glory</i>	13.5 million gallons	1968	South Africa
21	<i>Torrey Canyon</i>	25-36 million gallons	1967	United Kingdom
22	<i>Burmah Agate</i>	10.7 million gallons	1979	United States
23	<i>Exxon Valdez</i>	10.8 million gallons	1989	United States

\*The BP Oil Spill

**Table 3:  
Competing Logics and Conflicting Positions on the Natural Environment**

<b>Logics</b>	<b>Position(s)</b>	<b>Counter position(s)</b>
<b>1. Differing ways in which we understand science and scientific knowledge.</b>	We must take care of nature as a complex ecosystem.	Nature will take care of itself.
<b>2. Differing value activities, people, assets and resources.</b>	The ecosystem is precious.	The ecosystem is only precious to the extent it is economically valuable.
<b>3. Differing beliefs about our roles in the universe.</b>	Humans have a moral responsibility to protect the environment.	Humans need balanced stewardship, not the exaltation of horticulture over humanity.
<b>4. Differing dimensions to that which we fear.</b>	The risk is too great, given the large impact of this low frequency event.	The risk is acceptable given the low frequency of this event and its large interim benefits.
<b>5. Differing ways in which we receive and interpret messages of risk.</b>	Credible science-based experts and a wide variety of reputable information outlets have told us that current resource extraction methods are risky.	Well-known cultural commentators and high profile politicians have told us that current resource extraction methods are acceptable under the circumstances.
<b>6. Differing ways in which we prioritize development goals</b>	Nature's needs to be prioritized over our societal needs.	Societal needs must be prioritized, in all but the most extreme cases, over the needs of nature.
<b>7. Differing ways in which we view the appropriate role of government intervention.</b>	The government must respond - and quickly.	The government should only respond as a last resort, otherwise the response will be simply political.

Source: Based on Hulme (2009).